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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,659	11/21/2003	Jean-Francois Saint Etienne	245501US41X CONT	9048

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EXAMINER	
HOSSAIN, TANIM M	
ART UNIT	**PAPER NUMBER**
2145	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/22/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/717,659	SAINT ETIENNE ET AL.	
	Examiner	Art Unit	
	Tanim Hossain	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 7, and 15 disclose the determination, through an equation, as to whether a certain packet switching network is considered to be deterministic. Because the determining of whether a network is deterministic does not produce a tangible result, but rather represents a determined value, which also can be determined outside the system, it does not meet the requirement for statutory subject matter. The conclusion of determinism by itself does not specifically lead to the occurrence of any result – it is simply a consideration of a value without any further process associated with it. As such, the claimed subject matter is not statutory.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For claim 7, the claim does not list steps through which the variables and results may be obtained, and there exists no explanation as to how these variables and results will reach a final result, through which a process is enacted. For claims 1, 7, and 15, it is unclear what result the equation is calculating. The term "latency" is not defined, and the use and purpose of the term "i number of virtual links passing through the buffer" is unclear, as to whether this should be included into the equation, or is a definition of what "i" is. Further, claims 1 and 15 do not end with a period, as required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 7, 8, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruckman (U.S. 2003/0048754) in view of Sugano (E.P. 0579472).

As per claims 1, 7, and 15, Bruckman teaches the determination of maximum latency, monitoring latency, and comparing a given latency with a value (paragraphs 0015, 0066, 0067). Bruckman does not specifically teach that the value is derived from an equation. Sugano teaches

the derivation of a value as a function of jitter, number of links, and frame duration (pages 6-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the specific calculation of a value and comparing it to a latency, as taught by Sugano in the system of Bruckman. The motivation for doing so lies in the fact that a specific calculation of a value is well known in the art of network measurement, in calculating threshold values, for example. Including a function dependent on network conditions whose result acts as a baseline value would allow for a transparent method to determine whether the latency meets a certain threshold, which would lead to further efficiency of the invention. Both inventions are from the same field of endeavor, namely the monitoring of network conditions.

As per claims 2, 8, and 16, Bruckman-Sugano further teaches adding virtual links one-by-one; and checking that the behavior of the entire network remains deterministic after each addition of a virtual link (Sugano: pages 6-7).

Claims 3-6, 9-14, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruckman-Sugano in view of Honcik (U.S. 5,761,625).

As per claims 3, 9, and 17, Bruckman-Sugano does not specifically teach that the packet switching network is located on an aircraft. Honcik teaches the use of a switching network on an aircraft with parameters associated with it (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the determination of determinism, as taught by Bruckman-Sugano, with an aircraft network system that calculates algorithms. The motivation for doing so lies in the fact that including a calculation and determination of a latency threshold, and whether the system meets the requirements of a threshold is essential for the

aircraft to function properly. The concept of meeting network thresholds is also well known in the art of aviation networks, which would therefore render the combination of a latency threshold with an aircraft network algorithm obvious. All inventions are from the same field of endeavor, namely the determination of acceptable network values, and acting accordingly given the results.

As per claims 4, 10, and 18, Bruckman-Sugano-Honcik teaches that the packet switching network includes a first switch connected to a first graphic screen and a second graphic screen (Honcik: figure 3; column 8, lines 1-19).

As per claims 5, 11, and 19, Bruckman-Sugano-Honcik teaches that the packet switching network includes a second switch connected to a flight parameters generator and an aircraft maintenance computer (Honcik: column 11, lines 12-15).

As per claims 6, 12, and 20, Bruckman-Sugano-Honcik teaches that the first graphic screen displays flight parameters and the second graphic screen displays flight and maintenance parameters (Honcik: figure 3; column 11, lines 12-15).

As per claim 13, Bruckman-Sugano-Honcik further teaches that the jitter refers to max jitter (Sugano: pages 6-7).

As per claim 14, Bruckman-Sugano-Honcik further teaches aggregating a number of the virtual links without causing any loss of segregation (Sugano: pages 6-7).

Response to Remarks

Applicant's remarks filed on November 22, 2006 have fully been considered.

a. As discussed above, the determination of determinism in response to a network calculation is still an abstract idea, given that the calculation does not lead to a tangible result. It is simply deeming a behavior as deterministic upon the calculation and comparison of certain values, which could be performed separately from the system. Furthermore, no action is performed in response to the determination. As such, claims 1-20 are not directed to statutory subject matter.

b. As discussed above, certain parameters of the equation and the "latency" term remain undefined and therefore unclear.

c. All remaining arguments are respectfully traversed by the new grounds of rejection, as set forth above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571/272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tanim Hossain
Patent Examiner
Art Unit 2145

JASON CARDONE
SUPERVISORY PATENT EXAMINER